



State of Utah

Department of
Environmental Quality

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Executive Director

DIVISION OF AIR QUALITY
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Director

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Governor

GARY HERBERT
Lieutenant Governor

DAQE-IN0141570001-08

August 18, 2008

Richard Thurgood
H & K Sand and Gravel
885 North Marchall Way
Layton, Utah 84041

Dear Mr. Thurgood:

Re: Intent to Approve: Portable Aggregate Processing Equipment
Various Counties in Utah – CDS SM; HAPs; NSPS; Title V Minor
Project Code: N014157-0001

The attached document is the Intent to Approve for the above-referenced project. The Intent to Approve is subject to public review. Any comments received shall be considered before an Approval Order is issued.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any questions you may have on this project to Mr. Tim DeJulis. He may be reached at (801) 536-4012.

Sincerely,

John T. Blanchard, Manager
Minor New Source Review Section

JTB:TDJ:kw

cc: Salt Lake Valley Health Department

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

**INTENT TO APPROVE: Portable
Aggregate Processing Equipment**

**Prepared By: Tim DeJulis, Engineer
(801) 536-4012
Email: tdejulis@utah.gov**

INTENT TO APPROVE NUMBER

DAQE-IN0141570001-08

Date: August 18, 2008

H & K Sand and Gravel

**Source Contact
Richard Thurgood
(801) 593-9177**

**M. Cheryl Heying
Executive Secretary
Utah Air Quality Board**

Summary of Air Quality Approval Order Process for Portable Sources
Non-metallic Mineral Processing Industry

This Approval Order is issued to H&K Sand and Gravel for the purpose of operating portable equipment that belongs to the non-metallic mineral processing industry, including aggregate processing plants. Sets of equipment chosen from the equipment approved in the tables at the end of this Approval Order shall be temporarily operated for a period of not more than 180 operating days in any calendar year at any site. A relocation shall not exceed 365 consecutive days at any location in the State of Utah. Prior to commencement of operation at a site, the source shall submit a Notice of Temporary Relocation to the Executive Secretary. If the plant operates at a site in compliance with the Approval Order, the Notice of Temporary Relocation, and the Temporary Relocation Approval Letter, dispersion modeling results have determined that there will be no adverse impacts on air quality at the nearest residence or commercial establishment. Compliance with the opacity limits and various operating practices listed in the conditions of the Approval Order shall be considered as application of Best Available Control Technology. The emission control measures listed in the conditions of this Approval Order shall apply to all of the sites at which the equipment approved by this Approval Order operates. The source may be required to adopt additional measures for controlling emissions to address site-specific concerns. The tables at the end of this Approval Order shall indicate whether the equipment is subject to the New Source Performance Standards, (NSPS, 40 CFR Part 60, Subpart OOO). The Temporary Relocation Approval Letter, which the source is required to possess prior to operation, shall list the allowable emissions and/or production limits for the relocation. This Approval Order limits the source to emissions, which are below the major source threshold, making it a “Synthetic Minor” source. Other applicability factors may still apply. The terms and conditions of this Approval Order are enforceable by both the State of Utah and the Federal Government.

The Notice of Intent (NOI) for the above-referenced project has been evaluated and has been found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an Approval Order (AO) by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notice of intent to approve will be published in the Salt Lake Tribune and Deseret News on August 22, 2008. During the public comment period, the proposal and the evaluation of its impact on air quality will be available for both you and the public to review and comment. If anyone so requests a public hearing, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated.

Please review the proposed AO conditions during this period and make any comments you may have. The proposed conditions of the AO may be changed as a result of the comments received. Unless changed, the AO will be based upon the following conditions:

1. This AO applies to the following company:

Corporate Office Location
H & K Sand and Gravel
885 North Marshall Way
Layton, Utah 84041

Phone Number (801) 593-9177

Fax Number (801) 593-9174

The equipment listed in this AO shall be operated at various locations throughout the State of Utah.

2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307) and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.
3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.
4. Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved in accordance with R307-401.
5. All records referenced in this AO or in applicable NSPS standards, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. Records shall be kept for the following minimum periods:
 - A. Emission inventories Five years from the due date of each emission statement or until the next inventory is due, whichever is longer.
 - B. All other records Two years
6. H&K Sand and Gravel shall install and operate the non-metallic mineral processing plants (aggregate plants) and shall conduct its operations of the aggregate plants in accordance with the terms and conditions of this AO, which was written pursuant to H&K Sand and Gravel's Notice of Intent submitted to the Division of Air Quality (DAQ) on May 2, 2008 and the terms and conditions of the Temporary Relocation Approval Letter issued by the Executive Secretary for each relocation. This Approval Letter will be based on the Division of Air Quality (DAQ) analysis of the information submitted to the Executive Secretary in the Notice of Temporary Relocation Form.
7. In the case of any discrepancy between the Conditions of the AO and the Temporary Relocation Approval Letter, the source shall be required to comply with the site-specific requirements in the Temporary Relocation Approval Letter.
8. The source shall be allowed to relocate any of the equipment listed in the Tables at the end of this AO, to any location approved by the Temporary Relocation Approval Letter.

9. Equipment listed in the Tables at the end of this AO can be replaced by other equipment of equal or lesser production capacity having the same function as the existing equipment with written notification to the Executive Secretary, and adherence to the following Division of Air Quality “Replacement in Kind” provision:
 - A. Potential to emit of the replacement equipment is the same or lower;
 - B. Horse power rating or rated capacity of replacement equipment remains the same or lower;
 - C. Number of emission points or emitting units is the same or lower;
 - D. No additional types of air contaminants are emitted as a result of the replacement;

Additional information is required if replacement equipment is subject to an NSPS standard.

Relocation

10. Prior to operating equipment at any site, the owner/operator shall obtain a Temporary Relocation Approval Letter in accordance with R307-401-17, UAC. Temporary relocations shall not exceed 180 operating days in any calendar year not to exceed 365 consecutive days, starting from the initial relocation date, at any site. The DAQ needs at least ten working days for processing and issuing a Temporary Relocation Approval Letter, however Notices of Temporary Relocation may be submitted as soon as the details on equipment to be used and when the equipment will be at each specific site are available. Notices of Temporary Relocation shall include the following information (Form 15a is available from the DAQ):
 - A. The location of the proposed site (Please include directions on how to go to the site).
 - B. The expected startup and completion dates for operating at the proposed site.
 - C. A site diagram showing the general equipment location on site (to scale), and the distance to the nearest houses, barns or commercial operations (to scale if the plant boundary is located within one mile of these buildings).
 - D. A list of the equipment to be operated at the proposed site.
 - E. Additional emission control measures for various emission points that the source proposes to adopt at each site, which will require application of emission controls beyond the control measures required by this AO.
 - F. Include a reference to this AO.
11. Before granting a Temporary Relocation Approval Letter, the proposed site will be evaluated by the Executive Secretary to verify that the plant will not cause a new

violation of the National Ambient Air Quality Standards (NAAQS). This evaluation will be based on the computer dispersion modeling conducted by the DAQ and information that shall be submitted in the Notice of Temporary Relocation. The Notice of Temporary Relocation shall be submitted at least 10 working days prior to the source operation and shall contain a Fugitive Dust Control Plan (FDCP). If violations of the NAAQS are suspected at the proposed site, the owner/operator shall be required to:

- A. Apply air pollution controls at the proposed site which are more stringent than those outlined in the conditions of this AO and/or
- B. Perform continuous ambient monitoring for PM₁₀ for at least the first 30 days of operation to demonstrate that the applicable NAAQS are not violated at the site under normal operating conditions. Monitoring shall be initiated only after consultation with DAQ and carried out in accordance with the Utah DAQ guidelines.

Relocations expected to exceed 180 operating days shall be preceded with a Notice of Intent for a permanent source and a valid AO shall be obtained prior to the end of the 180 days.

- 12. Relocation to Sites Listed in the Utah PM₁₀ State Implementation Plan: Temporary sources that plan to relocate to sites listed in the Utah PM₁₀ State Implementation Plan (PM₁₀ SIP) shall be required to meet standards and adopt control strategies listed in the PM₁₀ SIP for the site, if the PM₁₀ SIP requirements for the site are more stringent than the requirements specified in the conditions of this AO. For sources that submit a Notice of Temporary Relocation to relocate to a site that is listed in the PM₁₀ SIP, the requirements under which the source would be required to operate shall be specified in the Temporary Relocation Approval Letter.
- 13. The Temporary Relocation Approval Letter, which the source is required to possess prior to operation at a site, shall list the allowable emissions for the relocation based on the aggregate production capacity, the projected hours of operation during the period of relocation, and the degree of enforceable emissions control that the source proposes to adopt during the period of relocation. The owner/operator shall maintain records of all equipment listed in the Tables at the end of the AO. The records shall contain actual hours of operation of the equipment at each site and the actual emissions that resulted from the operation at each site. These emissions shall be summarized for each piece of equipment at the completion of operation at each site, or every 6 months, whichever comes first (or as directed by the Executive Secretary) and made available to the Executive Secretary or the Executive Secretary's representative upon request.

Limitations

- 14. Visible emissions from the following emission points shall not exceed the following values:
 - A. All crushers - 15% opacity
 - B. All screens - 10% opacity

C. All conveyor transfer points - 10% opacity

D. All other points - 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

NSPS equipment shall be subject to the requirements stated in 40 CFR Subpart A sections 60.7, 60.8, and 60.11.

15. Hours of Operation

- A. The actual hours of operation of the plant shall not exceed 16 hours during any 24-hour period (from mid-night to mid-night). The actual time of operation shall be between 6:00 AM and 10:00 PM. The hours of operation may be altered upon approval of the Executive Secretary. Any request for a change in these hours shall include modeling showing that all National Ambient Air Quality Standards are met.
- B. The total hours of actual operation/production shall not exceed 2,880 hours during the entire period of relocation to any site.
- C. Records of hours of operation shall be kept for all periods when the plant is in operation. Hours of operation shall be determined by a supervisor responsible for the monitoring and maintenance of an hours-of-operation log. An example of an hours-of-operation log is shown in the following Table:

DATE	START TIME	STOP TIME	# OF HOURS
3-1-95	7:10 AM	11:35 AM	4.5
3-1-95	12:30 PM	5:35 PM	5.0
3-1-95 Total			
3-2-95	7:30 AM	5:30 PM	10.0
More entries	in these	intervening rows	from March to August
8-30-95	6:15 AM	4:15 PM	10.0
Grand Total For Location			29.5

16. Haul Road Limitation

The speed of mobile equipment (trucks, front end loaders, etc.) shall not exceed 15 miles per hour. The haul road speed shall be posted, at a minimum, on site at the beginning of the haul road so that it is clearly visible from the haul road.

17. Open Area Limitations

- A. The area occupied by the storage piles generated by this operation shall not exceed 1.5 acres.
- B. The area disturbed by this operation, which has not been stabilized to prevent wind erosion, shall not exceed 5.0 acres.
- C. Control of disturbed or stripped areas shall be required at all times for the duration of the project/operation per R307-205, UAC.

18. Prior to granting the Temporary Relocation Approval Letter for operation at any site, the DAQ will verify that the total emissions from the site (or other sites that are considered to be adjacent or contiguous to the site) for all equipment owned or operated by a company (including equipment permitted under a permanent AO) over any 12-month period does not exceed major source thresholds, at each site, for the Operating Permit program. These thresholds are 100 tons per year of non-HAPs, 25 tons per year of any combination of HAPs and 10 tons per year of any single HAP.

19. The daily production limit specified in the Temporary Relocation Approval Letter in tons of product produced per 24-hour period (midnight to midnight) shall not be exceeded without prior approval in accordance with R307-401, UAC. Records of daily production shall be kept for all periods when the plant is in operation. The daily production shall be determined by belt scale records, scale house records, vendor receipts or by any other method as acceptable to the Executive Secretary or the Executive Secretary's representative. Records of daily production, shall be made available to the Executive Secretary or the Executive Secretary's representative upon request. Hours of operation shall be determined by the person monitoring and maintaining the operations log.

20. Visible fugitive dust emissions from haul-road traffic and mobile equipment in operational areas shall not exceed 20% opacity at any point. Visible emission determinations shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Visible emissions shall be measured at the densest point of the plume but at a point not less than 1/2 vehicle length behind the vehicle and not less than 1/2 the height of the vehicle.

Roads and Fugitive Dust

21. H&K Sand and Gravel shall abide by a fugitive dust control plan acceptable to the Executive Secretary for control of all dust sources associated with the equipment listed at the end of this AO. H&K Sand and Gravel shall submit a fugitive dust control plan to the Executive Secretary, attention: Compliance Section, for approval within 30 days of the date of this AO. If H&K Sand and Gravel has an approved fugitive dust control plan in place, H&K Sand and Gravel shall abide by the most current fugitive dust control plan approved by the Executive Secretary.

22. The source shall abide by all applicable requirements of R307-205 (statewide) and R307-309 for (PM₁₀ non-attainment areas of Salt Lake, Utah, Davis Counties and Ogden City) for Fugitive Emission and Fugitive Dust sources.
23. Water sprays or chemical dust suppression sprays shall be installed at the following points to control fugitive emissions:
 - A. All crushers
 - B. All screens
 - C. All unenclosed conveyor transfer points *

* Enclosed is defined as having three (3) or more sides.

Fuels

24. The owner/operator shall use #2 fuel oil as fuel in the generator engines.
25. The sulfur content of any fuel oil or diesel burned shall not exceed:
 - A. 0.50 percent by weight for diesel fuels consumed in generator engines.

The sulfur content shall be determined by ASTM Method D-4294-89 or approved equivalent. Certification of other fuels shall be either by H&K Sand and Gravel's own testing or test reports from the fuel marketer.

Federal Limitations and Requirements

26. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subpart A (General Provisions), 40 CFR 60.1 to 60.18 and Subpart OOO, 40 CFR 60.670 to 60.676 (Standards of Performance for Nonmetallic Mineral Processing Plants) apply to this installation.

Records & Miscellaneous

27. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded.
28. The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.

29. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting DAQ. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site:

<http://www.airquality.utah.gov>

DAQ is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final AO.

Sincerely,

John T. Blanchard, Manager
Minor New Source Review Section

<u>STATE OF UTAH</u> <u>DIVISION OF AIR QUALITY</u>
<u>A.O.#</u> DAQE-AN0141570001-08
<u>DATE:</u>
<u>SIGNED:</u>

Equipment NOT Subject to New Source Performance Standards (NSPS)

40 CFR Part 60, Subpart OOO - Plants constructed, reconstructed or modified on or before August 31, 1983

Equipment Description	Capacity/Production Rate	Manufacture Date	AO Number	Manufacturer	Model Number	Serial Number
Generator		2001	DAQE-AN0141570001-08	Ingersoll (Volvo)		
Generator	545 kW	1998	DAQE-AN0141570001-08	Caterpillar		

Non - NSPS Equipment Listing for General AO

<u>STATE OF UTAH</u> <u>DIVISION OF AIR QUALITY</u>
<u>A.O.#</u> DAQE-AN0141570001-08
<u>DATE:</u>
<u>SIGNED:</u>

Equipment Subject to New Source Performance Standards (NSPS)

40 CFR Part 60, Subpart OOO - Plants constructed, reconstructed or modified after August 31, 1983

Equipment Description	Capacity/Production Rate	Manufacture Date	AO Number	Manufacturer	Model Number	Serial Number
Portable Crushing Plant	200 tons per hour (TPH) 45" Cone crusher with 5 x 16 three-deck screen	1991	DAQE-AN0141570001-08	Cedar Rapids	1130	
Jaw Crusher	500 TPH 30" x 42"	1996	DAQE-AN0141570001-08	Pioneer/SpoMac		
Jaw Crusher	500 TPH 30" x 42"	2008	DAQE-AN0141570001-08			
Cone Crusher	300 TPH 54" diameter	2008	DAQE-AN0141570001-08			
Conveyors	Four each 36" x 60'	2008	DAQE-AN0141570001-08			
Conveyors	Two each 30" x 50'	2008	DAQE-AN0141570001-08			

Conveyors	Two each 36" x 50'	2008	DAQE-AN0141570001-08			
Radial Stacker	36" x 100 '	2008	DAQE-AN0141570001-08	Kolberg		
Stacker	36" x 105'	2008	DAQE-AN0141570001-08			
Screen	300 TPH 6' x 20'	2008	DAQE-AN0141570001-08	Cedar Rapids		
Screen	200 TPH	2008	DAQE-AN0141570001-08			
Rip-Rap Plant	300 TPH	2008	DAQE-AN0141570001-08			

NSPS Equipment Listing for General AO